

On the Identities of *Trivia buttoni* and *Trivia galapagensis* MELVILL, 1900 (Mollusca : Gastropoda)

BY

ALAN SOLEM

Department of Zoology, Chicago Natural History
Museum, Chicago 5, Illinois

(Plate 4)

Discovery of the holotype of *Cypraea (Trivia) buttoni* MELVILL, 1900 and a set of three specimens labeled "types" of *Cypraea (Trivia) galapagensis* MELVILL, 1900 in the collection of the late Fred L. Button,—purchased by Chicago Natural History Museum in 1960,—prompted an attempt to determine their relationships. This was only partly successful, since requisite type material could not always be located, but a refiguring of the holotype of *Trivia buttoni* and a good paratype of *T. galapagensis* does allow clarification of some confusing issues and proposed new synonymies permit a modest reduction in the "23 or more species of *Trivia* that have been reported from the Eastern Pacific" (CAMPBELL, 1961:25).

The most recent review of the trivias (ALLAN, 1956) is almost a verbatim compilation from SCHILDER (1932). The latter considered *Trivia buttoni* to be a distinct species with a subspecies, *T. b. panamensis* DALL, 1902. *Trivia galapagensis* was treated as a subspecies of *T. sanguinea* GRAY, 1832. Otherwise there has been little mention in the literature of either species. BUTTON (1902:256 and 1908:11) pointed out that the type of *T. galapagensis* was worn and that in fresh individuals the ribs extend over the dorsum. HOWARD & SPHON (1960:42) in their key of Panamic *Trivia* differentiate *T. galapagensis* by its smooth dorsum, relying on MELVILL's misleading description and overlooking BUTTON's later comments.

We have, at present, practically no knowledge on the extent of variation within species of *Trivia* and minimal information on the geographic range of the species. The present paper does nothing to remedy this unfortunate situation, being necessarily restricted to a consideration of type materials. Much of the trouble dates from the original work done on Galapagos *Trivia* by GRAY (1832), based on materials collected by Hugh Cuming. Little or no question has arisen concerning the identity of *T. maugeri* and *T. pacifica*, but much confusion and doubt has ex-

isted concerning *T. fusca*, *T. rubescens* and *T. sanguinea* (for example, see BUTTON, 1902: 255 to 256). It might be added here that the record of *T. rubescens* from Wreck Bay, Chatham Island, Galapagos, given by SCHWENDEL (1938: 2) is incorrect. The specimens (now Chicago Natural History Museum number 27521) are of *T. pacifica*.

At my request, Mr. S. P. Dance of the Mollusca Department of the British Museum (Natural History) attempted to locate the types of *Trivia fusca*, *T. rubescens* and *T. sanguinea* in order to compare them with photographs of the best specimen of *T. galapagensis* and also to compare any material of *T. acutidentata* GASKOIN, 1836 and *T. paucilirata* SOWERBY, 1870 with photographs of *T. buttoni*. I am deeply indebted to Mr. Dance for his help in locating the specimens and for his advice concerning the relationships of the several forms. I am also indebted to Dr. Joseph Rosewater of the United States National Museum for the loan of a paratype of *Trivia panamensis* DALL, 1902, and to Dr. Myra Keen of Stanford University for information on paratypes of *T. galapagensis*.

On the basis of the information supplied by Mr. Dance, study of the original literature, and specimen comparisons, I would propose the following synonymies, relegating both of MELVILL's species to the status of junior synonyms.

Trivia (Dolichupis) paucilirata (SOWERBY, 1870)

(Plate 4, figures 1 to 3)

Cypraea paucilirata SOWERBY, 1870, Thes. Conch., *Cypraea*, pp. 49, 53, plt. 36, fig. 502; plt. 37, fig. 526—locality unknown.

Cypraea (Trivia) buttoni MELVILL, 1900, Ann. Mag. Nat. Hist., (7), 6:209-210, 2 figs.—locality unknown.

Trivia panamensis DALL, 1902, Nautilus, 16 (4), pp. 43-44 - Albatross Station 2798, 18 fms., Panama



Figure 1



Figure 2



Figure 3

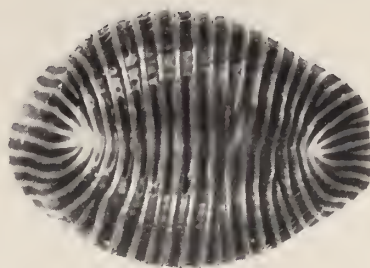


Figure 4



Figure 5

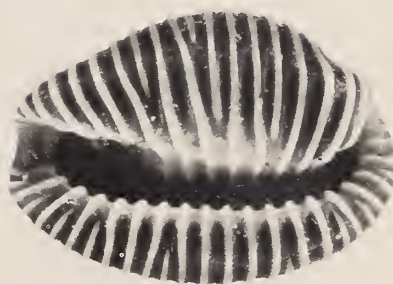


Figure 6

Figures 1, 2, and 3: *Trivia (Dolichupis) paucilirata* (SOWERBY). Holotype of *Trivia buttoni* MELVILL, 1900. Chicago Natural History Museum number 116972.

Figures 4, 5, and 6: *Trivia (Pusula) rufescens* (GRAY, 1832). Paratype of *Trivia galapagensis* MELVILL, 1900. Chicago Natural History Museum number 116974.

